

## Search Results -

| Terms      | Documents |
|------------|-----------|
| 16 and 110 | 5         |

# JPO Abstracts Database EPO Abstracts Database EPO Abstracts Database Derwent World Patents Index IBM Technical Disclosure Bulletins

Database:

|                | 16 and 110 | Ē |       |
|----------------|------------|---|-------|
| Refine Search: |            | ₹ | Clear |

# **Search History**

**Today's Date: 9/25/2000** 

| DB Name | <b>Query</b>              | Hit Count | Set Name   |
|---------|---------------------------|-----------|------------|
| USPT    | 16 and 110                | 5         | <u>L11</u> |
| USPT    | genetic near3 vaccine     | 198       | <u>L10</u> |
| USPT    | 16 and 18                 | 0         | <u>L9</u>  |
| USPT    | cell near3 specifc        | 1         | <u>L8</u>  |
| USPT    | cell-specifc              | 0         | <u>L7</u>  |
| USPT    | 14 and 15                 | 324       | <u>L6</u>  |
| USPT    | 11 and 13                 | 984       | <u>L5</u>  |
| USPT    | receptor near3 binding    | 13678     | <u>L4</u>  |
| USPT    | 12 near3 binding          | 7742      | <u>L3</u>  |
| USPT    | (nucleic adj acid) or dna | 45925     | <u>L2</u>  |
| USPT    | vaccine                   | 9987      | <u>L1</u>  |



**Generate Collection** 

## Search Results - Record(s) 1 through 5 of 5 returned.

☐ 1. Document ID: US 6072048 A

L11: Entry 1 of 5

File: USPT

Jun 6, 2000

US-PAT-NO: 6072048

DOCUMENT-IDENTIFIER: US 6072048 A

TITLE: DNA molecule encoding for cellular uptake of Mycobacterium

tuberculosis and uses thereof

Full Title Citation Front Review Classification Date Reference Claims KMC Draw Desc Imagé

☐ 2. Document ID: US 6008201 A

L11: Entry 2 of 5

File: USPT

Dec 28, 1999

US-PAT-NO: 6008201

DOCUMENT-IDENTIFIER: US 6008201 A

TITLE: DNA molecule encoding for cellular uptake of mycobacterium

tuberculosis and uses thereof

Full Title Citation Front Review Classification Date Reference Claims KMC Draw Desc Image.

☐ 3. Document ID: US 5861290 A

L11: Entry 3 of 5

File: USPT

Jan 19, 1999

US-PAT-NO: 5861290

DOCUMENT-IDENTIFIER: US 5861290 A

TITLE: Methods and polynucleotide constructs for treating host cells for

infection or hyperproliferative disorders

Full Title Citation Front Review Classification Date Reference Claims KMC Draw Desc Imagé:

4. Document ID: US 5837533 A

L11: Entry 4 of 5

File: USPT

Nov 17, 1998

US-PAT-NO: 5837533

DOCUMENT-IDENTIFIER: US 5837533 A

TITLE: Complexes comprising a nucleic acid bound to a cationic polyamine

having an endosome disruption agent





Full Title Citation Front Review Classification Date Reference Claims KWIC Draw Desc Image

☐ 5. Document ID: US 5837510 A

L11: Entry 5 of 5

File: USPT

Nov 17, 1998

US-PAT-NO: 5837510

DOCUMENT-IDENTIFIER: US 5837510 A

TITLE: Methods and polynucleotide constructs for treating host cells for

infection or hyperproliferative disorders

Full Title Citation Front Review Classification Date Reference Claims KWC Draw Desc Image

Generate Collection

| Terms      | Documents |
|------------|-----------|
| l6 and l10 | 5         |

Display

20 Documents, starting with Document: 5

5

Display Format: TI Change Format

```
(FILE 'HOME' ENTERED AT 17:38:31 ON 25 SEP 2000)
     FILE 'MEDLINE, CAPLUS, BIOSIS, SCISEARCH' ENTERED AT 17:38:44 ON 25 SEP
     2000
            220 S GENETIC (W) VACCINE
L1
           2152 S GENETIC (5A) VACCINE
L2
L3
         181459 S (NUCLEIC (W) ACID OR DNA) (3A) BINDING
L4
         186018 S RECEPTOR (3A) BINDING
L5
              1 S L2 AND L3 AND L4
           1072 S CELL-SPECIFIC (3A) RECEPTOR
L6
              1 S L2 AND L3 AND L6
L7
=> d bib ab 17
     ANSWER 1 OF 1 CAPLUS COPYRIGHT 2000 ACS
L7
AN
     1999:529282 CAPLUS
DN
     131:154480
ΤI
     Methods for obtaining a cell-specific binding molecule that increases
     uptake and/or specificity of a genetic vaccine to a
     target cell
     Punnonen, Juha; Stemmer, Willem P. C.; Howard, Russell; Patten, Phillip
IN
Α.
PΑ
     Maxygen, Inc., USA
SO
     PCT Int. Appl., 78 pp.
     CODEN: PIXXD2
DT
     Patent
     English
FAN.CNT 4
                                           APPLICATION NO.
     PATENT NO.
                      KIND
                            DATE
                                                             DATE
                      ____
PΙ
     WO 9941402
                       A2
                            19990819
                                           WO 1999-US3023
                                                             19990210
                      A3
                            19991111
     WO 9941402
             AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
             KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,
             MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
             TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,
TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                       A1
                            19990830
                                           AU 1999-26742
                                                             19990210
     AU 9926742
PRAI US 1998-21769
                      19980211
     US 1998-74294
                      19980211
     WO 1999-US3023
                      19990210
     The present invention provides methods for obtaining a cell-specific
AΒ
     binding mol. that is useful for increasing uptake or specificity of a
     genetic vaccine to a target cell. The methods involve
     (1) creating a library of recombinant polynucleotides encoding
     polypeptides with a nucleic acid binding
     domain and polypeptides with a cell-specific binding domain; and (2)
     screening said library for recombinant polynucleotides that encode mols.
     that can bind to a nucleic acid and also to a cell-
     specific receptor. Specifically, the invention
```

describes the use of the DNA shuffling method to evolve receptor binding components of enterotoxins derived from Vibrio cholerae and enterotoxigenic rains of E. coli for improved achment to cell surface

receptors and for improved entry to and transport across the cells of the intestinal epithelium. An antigen of interest can be fused to these toxin

subunits to facilitate the screening of evolved enterotoxin subunits, and also to facilitate oral delivery of proteins. The invention also provides

methods of evolving a bacteriophage-derived vaccine delivery vehicle to obtain a delivery vehicle having enhanced ability to enter a target cell.

```
(FILE 'HOME' ENTERED AT 17:38:31 ON 25 SEP 2000)
     FILE 'MEDLINE, CAPLUS, BIOSIS, SCISEARCH' ENTERED AT 17:38:44 ON 25 SEP
     2000
L1
            220 S GENETIC (W) VACCINE
L2
           2152 S GENETIC (5A) VACCINE
         181459 S (NUCLEIC (W) ACID OR DNA) (3A) BINDING
L3
L4
         186018 S RECEPTOR (3A) BINDING
L5
              1 S L2 AND L3 AND L4
L6
           1072 S CELL-SPECIFIC (3A) RECEPTOR
L7
              1 S L2 AND L3 AND L6
         223217 S VACCINE
rs
L9
             10 S L8 AND L3 AND L4
              1 S L3 AND L6 AND L8
L10
             10 DUP REM L9 (0 DUPLICATES REMOVED)
L11
=> d 1-10 au ti so 111
T.11
    ANSWER 1 OF 10 MEDLINE
     Doffinger R; Jouanguy E; Dupuis S; Fondan'eche M C; Stephan J L; Emile J
ΑIJ
     F; Lamhamedi-Cherradi S; Altare F; Pallier A; Barcenas-Morales G; Meinl
Ε;
     Krause C; Pestka S; Schreiber R D; Novelli F; Casanova J L
TΙ
     Partial interferon-gamma receptor signaling chain deficiency in a patient
     with bacille Calmette-Guerin and Mycobacterium abscessus infection.
     JOURNAL OF INFECTIOUS DISEASES, (2000 Jan) 181 (1) 379-84.
SO
     Journal code: IH3. ISSN: 0022-1899.
    ANSWER 2 OF 10 CAPLUS COPYRIGHT 2000 ACS
L11
     Punnonen, Juha; Stemmer, Willem P. C.; Howard, Russell; Patten, Phillip
IN
Α.
TΤ
     Methods for obtaining a cell-specific binding molecule that increases
     uptake and/or specificity of a genetic vaccine to a target cell
SO
     PCT Int. Appl., 78 pp.
     CODEN: PIXXD2
L11 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2000 ACS
     Carson, Susan D. Biegel; Klebba, Philip E.; Newton, Salete M. C.;
     Sparling, P. Frederick
TΙ
     Ferric enterobactin binding and utilization by Neisseria gonorrhoeae
     J. Bacteriol. (1999), 181(9), 2895-2901
SO
     CODEN: JOBAAY; ISSN: 0021-9193
    ANSWER 4 OF 10 CAPLUS COPYRIGHT 2000 ACS
L11
     Grandi, Guido
IN
     Targetting and uptake of DNA by animal cells by receptor-mediated
ΤI
     endocytosis using fusion protein of toxins and DNA-
     binding proteins
SO
     PCT Int. Appl., 85 pp.
     CODEN: PIXXD2
     ANSWER 5 OF 10 CAPLUS COPYRIGHT 2000 ACS
L11
ΙN
     King, Dannie H.
     Nucleic acid composition with ganglioside GM1-binding protein for
ΤI
delivery
```

to mucosal, neural or other cells, nucleic acid expression, and immunomodulation or gene therapy

SO PCT Int. Appl., pp. CODEN: PIXXD2

L11 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2000 ACS

IN Tong, Shuping; Li, Jisu; Wands, Jack R.

TI Hepadnavirus receptors and receptor-encoding nucleic acids, receptor-binding hepadnaviral pre-S protein fragments, and hepadnavirus vaccines

SO PCT Int. Appl., 174 pp.

CODEN: PIXXD2

L11 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2000 ACS

IN Collier, R. John; Eisenberg, David; Fu, Haian; Choe, Seunghyon

TI Diphtheria toxin **receptor-binding** region, and use for **vaccine** 

SO PCT Int. Appl., 64 pp. CODEN: PIXXD2

L11 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2000 ACS

IN Bisaccia, Emil; Klainer, Albert S.

TI Photoactive compounds, especially psoralens, and photopheresis in treatment of and **vaccine** production against viral infections, especially AIDS

SO PCT Int. Appl., 44 pp. CODEN: PIXXD2

L11 ANSWER 9 OF 10 MEDLINE

AU Tan J A; Joseph D R; Quarmby V E; Lubahn D B; Sar M; French F S; Wilson E

TI The rat androgen receptor: primary structure, autoregulation of its messenger ribonucleic acid, and immunocytochemical localization of the receptor protein.

SO MOLECULAR ENDOCRINOLOGY, (1988 Dec) 2 (12) 1276-85. Journal code: NGZ. ISSN: 0888-8809.

L11 ANSWER 10 OF 10 MEDLINE

AU Wilson E M; Lubahn D B; French F S; Jewell C M; Cidlowski J A

TI Antibodies to steroid **receptor** deoxyribonucleic acid **binding** domains and their reactivity with the human glucocorticoid receptor.

SO MOLECULAR ENDOCRINOLOGY, (1988 Nov) 2 (11) 1018-26. Journal code: NGZ. ISSN: 0888-8809.

#### => d bib 4-8 111

L11 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2000 ACS

AN 1999:27954 CAPLUS

DN 130:77075

TI Targetting and uptake of DNA by animal cells by receptor-mediated endocytosis using fusion protein of toxins and DNA-binding proteins

IN Grandi, Guido

PA Chiron S.P.A., Italy

SO PCT Int. Appl., 85 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

```
JP, US
         RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR. IE, IT, LU, MC, NL,
             PT, SE
PRAI GB 1997-13122
                       19970620
RE.CNT 6
(1) Dana Farber Cancer Inst Inc; WO 9522618 A 1995
(2) Maxim Pharmaceuticals; WO 9705267 A 1997
(3) Miles Inc; WO 9404696 A 1994
(4) Starnbach Michael N; WO 9613599 A 1997
(5) Starnbach Michel N; WO 9723236 A 1997
ALL CITATIONS AVAILABLE IN THE RE FORMAT
L11 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2000 ACS
     1997:207764 CAPLUS
AN
DN
     126:203696
     Nucleic acid composition with ganglioside GM1-binding protein for
ΤI
delivery
     to mucosal, neural or other cells, nucleic acid expression, and
     immunomodulation or gene therapy
IN
     King, Dannie H.
PΑ
     Maxim Pharmaceuticals, USA
     PCT Int. Appl., 22 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO.
                                                            DATE
PΙ
     WO 9705267
                      A2
                            19970213
                                           WO 1996-US12041 19960719
        W: AU, CA, JP
         RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,
SE
     AU 9665057
                            19970226
                       A1
                                           AU 1996-65057
                                                            19960719
     EP 840796
                       A2 19980513
                                           EP 1996-924664
                                                            19960719
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
     JP 11510164
                            19990907
                       T2
                                          JP 1996-507664
                                                            19960719
PRAI US 1995-1527
                      19950726
     WO 1996-US12041 19960719
L11 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2000 ACS
     1997:220629 CAPLUS
ΑN
DN
     126:208747
ΤI
     Hepadnavirus receptors and receptor-encoding nucleic
     acids, receptor-binding hepadnaviral pre-S
     protein fragments, and hepadnavirus vaccines
ΙN
     Tong, Shuping; Li, Jisu; Wands, Jack R.
PΑ
     General Hospital Corporation, USA
SO
     PCT Int. Appl., 174 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
                      KIND
                                           APPLICATION NO.
     PATENT NO.
                            DATE
                                           WO 1996-US12098 19960722
PI.
    WO 9704000
                     A1
                            19970206
        W: AU, CA, JP, MX
        RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,
SE
                            19990727
                                           US 1996-683262
                                                            19960718
    US 5929220
                       Α
    AU 9666792
                       Α1
                            19970218
                                           AU 1996-66792
                                                            19960722
    EP 853629
                            19980722
                                          EP 1996-926759
                                                            19960722
                      A1
```

R: AT, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE, PT, IE

JP 1996-506950

19960722

19990914

T2

JP 11510381

```
WO 1996-US12098
                       19960722
                     CAPLUS COPYRIGHT 2000 ACS
     ANSWER 7 OF 10
 T.11
      1994:156463 CAPLUS
 DN
      120:156463
      Diphtheria toxin receptor-binding region, and use for
 ΤI
      vaccine
      Collier, R. John; Eisenberg, David; Fu, Haian; Choe, Seunghyon
 IN
 PΑ
      President and Fellows of Harvard College, USA
      PCT Int. Appl., 64 pp.
      CODEN: PIXXD2
 DT
      Patent
 LA
      English
 FAN.CNT 1
      PATENT NO.
                      KIND DATE
                                           APPLICATION NO.
                                                             DATE
                      ----
                                            -----
 PΙ
     WO 9321769
                      A1 19931111
                                           WO 1993-US4166 19930503
         W: AU, BB, BG, BR, CA, CZ, HU, JP, KP, KR, LK, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SK, UA
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
     AU 9342304
                             19931129
                      A1
                                          AU 1993-42304
                                                             19930503
     EP 643559
                        A1
                             19950322
                                            EP 1993-911012
                                                             19930503
     EP 643559
                        В1
                             19990414
         R: AT, BE, CH, DE, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
      JP 07506821 T2 19950727 JP 1993-519584
                                                             19930503
     AT 178907
                        Ε
                             19990415
                                           AT 1993-911012
                                                             19930503
                        Т3
     ES 2130265
                             19990701
                                           ES 1993-911012
                                                             19930503
     US 5843711
                       Α
                             19981201
                                           US 1995-552248
                                                             19951102
 PRAI US 1992-881394
                      19920506
     WO 1993-US4166
                      19930503
     US 1993-119316
                      19930909
     ANSWER 8 OF 10 CAPLUS COPYRIGHT 2000 ACS
     1991:20282 CAPLUS
 DN
     114:20282
     Photoactive compounds, especially psoralens, and photopheresis in
     treatment of and vaccine production against viral infections,
     especially AIDS
     Bisaccia, Emil; Klainer, Albert S.
 ΙN
 PΑ
 SO
     PCT Int. Appl., 44 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
 FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                            APPLICATION NO.
                                                             DATE
     _____
                             _____
     WO 9007952
                      A1 19900726
                                            WO 1990-US275
                                                             19900110
PI
         W: AU, BR, DK, ES, FI, HU, JP, NO
         RW: AT, BE, BF, BJ, CF, CG, CH, CM, DE, DK, ES, FR, GA, GB, IT, LU,
             ML, MR, NL, SE, SN, TD, TG
     US 4960408
                       Α
                                            US 1989-295454
                                                             19890110
                             19901002
     IL 92996
                                            IL 1990-92996
                             19960618
                                                             19900108
                        A1
                                            CA 1990-2007499 19900110
     CA 2007499
                        AΑ
                             19900710
                     . A1
                                            AU 1990-49545
                                                             19900110
     AU 9049545
                             19900813
     AU 638693
                        В2
                             19930708
                                            ZA 1990-171
                                                             19900110
     ZA 9000171
                       Α
                             19901128
                       A1
                                            EP 1990-902445
                                                             19900110
     EP 453497
                             19911030
         R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE
     BR 9007016
                     Α
                             19911112
                                           BR 1990-7016
                                                             19900110
     JP 04502621
                        T2
                             19920514
                                            JP 1990-502474
                                                             19900110
                                           ни 1991-2326
     HU 62487
                       Α2
                             19930528
                                                             19900110
 PRAI US 1989-295454
                      19890110
```

PRAI US 1995-1371

US 1989-364063

19890608

19950721

=> d ab 4-8 111

L11 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2000 ACS

AB A method of using receptor-mediated endocytosis to increase the efficiency

of DNA uptake by eukaryotic cells is described. The method uses fusion proteins of receptor-binding domains of toxins, therefore lacking the domains necessary for toxic activity, and DNA-binding domains. These fusion proteins are taken up by the receptor for the toxin and the DNA it is bound to is incorporated into the endosome. When the endosome is internalized, the complex is released and the protein stripped from the DNA leaving it free to become part of the host cell genome. A fusion protein of the heat-labile enterotoxin of Escherichia coli and the histone H1-like protein of Bordetella pertussis was prepd. by expression of the cloned gene. The protein was shown to retain DNA binding activity.

Similarly, a fusion protein of diphtheria toxin and GAL4 was shown to

have

DNA binding and to retain the normal binding of the toxin to Vero cells. The fusion protein was also rapidly internalized by Vero cells.

L11 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2000 ACS

AB A compn. comprising a GM1-binding protein and a polynucleotide in assocn. with the binding protein is described for delivery of a polynucleotide to mucosal, neural, or other cells. A method is described for modulating immunity comprising administering the compn. to an animal and expressing the polynucleotide whereby the animal generates an immune response to the product of the polynucleotide. Also included is a method for gene therapy

comprising administering to an animal a GM1-binding protein and a functional polynucleotide and expressing the polynucleotide in the animal whereby the function of the polynucleotide confers on the animal a therapeutic effect.

L11 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2000 ACS

AB The invention features purified nucleic acids that encode hepadnavirus cellular receptors. One receptor is a 170 kD cell surface glycoprotein, referred to as the p170 receptor. Parts of the p170 sequence are similar to that of basic carboxypeptidase. The pre-S domain of the duck hepatitis

B virus envelope protein binds the p170 receptor at a major neutralizing epitope (amino acids 87-102), within which are two basic amino acids (Lys-95, Arg-97) required for virion-receptor interaction. A 46-amino acid pre-S protein covering this binding site inhibits duck hepatitis B virus infection of primary duck hepatocytes. An addnl. pre-S binding protein of 120-kilodaltons (p120) was identified. P120 was identified as glycine decarboxylase. Its role as part of the viral receptor complex

was

suggested by its restricted expression in duck hepatitis B virus-infectible tissues, by co-localization of its binding site with three virus neutralizing epitopes, and by markedly decreased infectivity of duck hepatitis B virus mutants constructed with impaired pl20 binding motif.

L11 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2000 ACS

AB The invention features a polypeptide consisting of amino acids 379-535 of diphtheria toxin, and portions thereof. This region, shown by X-ray crystallog. anal. to comprise the receptor binding domain of diphtheria toxin, is useful for a vaccine and as a

cherapeutic against dipheneria (no therapeutic data).

AB Methods are provided for treatment of virus-infected patients using a photoactive compd. (e.g. psoralen or a psoralen deriv.) that, upon activation by exposure to electromagnetic radiation of a prescribed spectrum (e.g. UV light), inactivates and/or attenuates the virus and permits the treated virus and/or virus-infected cells to be presented to the patient's immune system. Medicaments and a photophoresis app. for carrying out the methods of the invention are also provided. Thus, patients with AIDS or AIDS-related complex were administered 8-methoxypsoralen and treated by photopheresis. Changes in levels of antibodies to Gp24 and Gp120, as well as CD4 helper cell percentages, are presented.